

Greengard, Tom

From: Greengard, Tom
Sent: Tuesday, August 31, 1999 5:29 PM
To: 'Kleeman.Gary@EPA.gov'; 'Carl.Spreng@State.CO.US'
Cc: Castaneda, Norma; Butler, Lane; Primrose, Annette; Brooks, Laura
Subject: Solar Ponds Plume Project Field Modifications

Gary and Carl,
Attached are two field modifications to the Solar Ponds Decision Document. These modifications document minor changes in barrier installation and in construction of monitoring wells. We have discussed both changes. Please call me if you have any questions.

Tom



Field Mod - Solar
Ponds Plume....



Field Mod SPP.doc



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DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

ADMIN RECORD

1101-B-00051

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FIELD MODIFICATION – SOLAR PONDS PLUME PROJECT

This field modification of the Final Solar Ponds Plume Decision Document is submitted to document a minor change in the construction approach and barrier installation for the Solar Ponds Plume project.

To expedite installation of the collection trench, the area was cut down by approximately 10 feet to reduce the depth of the excavation required for installation of the collection system. Barrier panels were also shortened.

Groundwater flow is generally in the colluvium immediately above the bedrock surface and in the weathered bedrock. In addition, the current Interceptor Trench System (ITS) system already captures 85% or more of the groundwater in the Solar Ponds Plume. This water will enter the new collection system along pre-existing laterals.

Based on the depth to water and the expected depth of the existing ITS piping, if the barrier panels extend from the base of the collection trench to within 10 feet of the ground surface, downgradient flow will be effectively blocked, and the groundwater plume will be effectively captured.

Instead of installing the barrier panels from the bottom of the trench to the ground surface, the panels will be installed at sufficient depth below ground surface to ensure that groundwater flow through the subsurface and through the ITS system is effectively blocked. Modifications will be as follows.

1. At the western end of the system (the western 350 feet), groundwater within the collection trench will be at the highest elevation. Panels will be installed at an elevation of 5893 feet, approximately 8 feet above the projected groundwater table and between 5 and 10 feet below ground surface.
2. For the middle 350 feet of the collection system, the top of panels will be 10 feet below ground surface.
3. At the eastern end of the system (the eastern 250 feet), the top of panels will be approximately 5 below ground surface.

The change will be documented in the completion report for this project, but the Decision Document will not be reissued.

FIELD MODIFICATION OF THE SOLAR PONDS PLUME DECISION DOCUMENT

This field modification of the Solar Ponds Plume Decision Document is being submitted to document a minor change in the monitoring well cluster. The rationale and details for the well cluster are defined in the Sampling and Analysis Plan for Groundwater Investigations Involving Actinide Drilling, the Industrial Area VOC Plume East Boundary, and Solar Ponds Plume Well Installations.

The Solar Ponds Plume Decision Document discusses that a well cluster will be installed north of the collection system to provide additional data and for performance monitoring purposes. Figure 5-1 shows the locations for three wells in this cluster. The intent was to monitor the colluvium, upper weathered bedrock, and lower weathered bedrock.

When the first well was installed, it was noted that only 7 feet of weathered bedrock is present at this location. The decision was then made to monitoring the entire weathered bedrock interval present at this location since wells in the upper and lower weathered bedrock were expected to give similar results.

This modification will be documented in the Completion Report for the Solar Ponds Plume project but the Decision Document will not be reissued.